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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/825,817	04/04/2001	Shinichi Mori	3815/120	2927

22913 7590 11/30/2004

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EXAMINER

NGUYEN, DUC M

ART UNIT	PAPER NUMBER
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2685

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/825,817

Applicant(s)

MORI ET AL.

Examiner

Duc M. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 3 and 9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-8,11 and 12 is/are rejected.
- 7) ☒ Claim(s) 4 and 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/4/03, 10/17/03, 8/2/04
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

This action is in response to applicant's response filed on 7/12/04. Claims 1-12 are now pending in the present application.

Election/Restrictions

1. Applicant's election without traverse of group II (claims 1, 2, 4, 8, 10-12) in Paper submitted on 7/12/04 is acknowledged. Accordingly, Claims 3, 9 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected inventions. An action for Group II (claims 1, 2, 4, 8, 10-12) follows.

Information Disclosure Statement

2. The references listed in the information disclosure statements submitted on 3/4/03, 10/17/03 and 8/2/04 have been considered by the examiner (see attached PTO-1449).

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-2, 7-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Suda (US 6,741,667).

Regarding claim 1, Suda discloses a communication quality acquisition

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apparatus comprising:

an acquisition means for receiving the CDMA pilot channels (see perch channel definition in **col. 1, lines 15-33**) sent from a plurality of wireless base stations through the use of spread (scrambling) signals different from each other (different scrambling codes) and acquiring delay profile based on said spread signals in said CDMA pilot channels (see **Figs. 11-12, col. 10, lines 50-60** and **col. 11, lines 18-25**). Here, the “perch channel” would read on the “pilot channel”, the scrambling code (i.e, long code and short code) would read on the spread signals as claimed; and

a storage means for storing the delay profile acquired by said acquisition means (inherently feature when generating a delay profile).

Regarding claim **2**, the claim is rejected for the same reason as set forth in claim 1 above. In addition, **Suda** discloses a synchronization means for establishing synchronization based on said spread signals in said CDMA pilot channels (see scrambling timing corrector in Fig. 3 and col. 13, line 29 – col. 14, line 49);

a measurement means for acquiring delay profile by reverse spreading said spread signals in said CDMA pilot channels (see **col. 12, lines 1-8** and **col. 10, lines 50-60**, noting that the correlation data comprising peaks would generate the delay profile as claimed, see **col. 9, lines 25-30**); and

a control means for controlling said synchronization means and measurement means (inherently feature in order for the device to perform the above processes)

Regarding claim **7**, the claim is rejected for the same reason as set forth in claim 1 above.

Regarding claim **8**, the claim is rejected for the same reason as set forth in claim 2 above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims **1-2, 5-8, 11-12** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Yano et al (US 6,754,255)** in view of **Suda (US 6,741,667)**.

Regarding claims **1-2**, **Yano** discloses a communication quality acquisition apparatus comprising :

a synchronization means for establishing synchronization based on spread signals in CDMA pilot channels (see **Fig. 4** and **col. 7, lines 1-15**);

a measurement means for acquiring delay profile by reverse spreading said spread signals in said CDMA pilot channels (see **Fig. 4** and **col. 5, lines 50-63**); and

a control means for controlling said synchronization means and measurement means (inherently feature in order for the device to perform the above processes)

However, **Yano** fails to disclose a plurality of pilot channels. However, it is noted that as suggested by **Yano**, the method is applicable to either a base station or a mobile terminal (see col. 9, lines 54-67), this implies that the method is also applicable to receiving a plurality of pilot channels as well (i.e, each base station receives a plurality of pilot channels from mobile terminals), in the similar way as disclosed by **Suda** (see

Fig. 3, col. 10, line 50-col. 12, line 33), wherein each mobile terminal receives a plurality of pilot channels from base stations. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the above teachings of Suda and Yano, for providing a method as claimed, so that synchronizations to signals received from a plurality of base stations can be achieved, for improving the system performance by properly synchronization to data transmissions.

Regarding claim 5, it is rejected for the same reason as set forth in claim 2 above. In addition, since the delay profile is obtained based on the despread signal after synchronization, it is clear that **Yano** would disclose the step of control the measurement means based on the acquired synchronization point information as claimed (see Fig. 4).

Regarding claim 6, it is rejected for the same reason as set forth in claim 2 above. In addition, it is clear that **Yano** would disclose the synchronization is controlled based on the off-track (out of synchronism) acquisition as claimed (see col. 10, lines 1-28).

Regarding claims 7-8, 11-12, the claims are rejected for the same reason as set forth in claims 1-2, 5-6 above, respectively.

Allowable Subject Matter

5. Claims 4, 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: As to claims 4, 10, the cited prior art fails to disclose or make it obvious an apparatus or method for providing synchronizations and acquiring delay profiles from a plurality of pilot channels which comprises steps as specified in the claims.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tsunehara et al (US Pat No. 6,484,034), Radio handset and position location system.

Kaku (US 5,812,593), De-spread code phase detection apparatus in spread spectrum type receiver.

Watanabe (US 6,195,343), Spread spectrum communication system.

Hayashi et al (6,522,625), Radio communication apparatus and radio communication method.

Kim et al (US 6,571,099), Cell searching method in asynchronous wideband code division multiple access system.

Yamamoto et al (US 6,549,545), Pilot signal detection method and receiver.

Natali et al (US 5,696,762), Rapid acquisition access channel scheme for CDMA systems.

Ariyavisitakul et al (US 5,084,891), Technique for jointly performing bit synchronization and error detection in a TDM/TDMA system.

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7. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

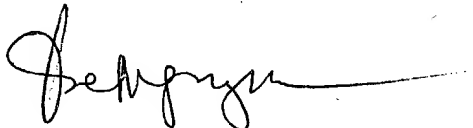
(703) 872-9314 (for formal communications intended for entry)
(for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington VA, Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc M. Nguyen whose telephone number is 703-306-4531. The examiner can normally be reached on Monday-Thursday (9:00 AM - 5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on 703-305-4385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Duc Nguyen



Nov 7, 2004